

and 37 have been amended and not narrowed. Claims 1-39 are pending in the application. Attached hereto is a marked-up version of the changes made to the above-identified application by the current amendment. The attached page is captioned "Version with markings to show changes made."

On page 2 of the Action, claims 1-8, 14-19, 28-32 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,144,962 issued to de la Salle in view of U.S. Patent no. 5,485,455 issued to Dobbins et al. ("Dobbins"). This rejection is respectfully traversed.

Claim 1 recites a network interface device configured to non-intrusively measure network traffic transferred in and out of an intranet for at least one connection. Claim 14 also recites that a metrics generator is configured to non-intrusively measure network traffic being transferred in and out of the at least one server and to generate performance metrics from the network traffic measured. Claim 17 recites that a first metrics server inside the intranet is configured to non-intrusively measure network traffic being transferred in and out of the intranet and to generate performance metrics based on the network traffic measured. Claim 28 recites non-intrusively measuring network traffic between at least one server in an intranet and at least one client outside the intranet. Claim 34 also recites non-intrusively measuring network traffic for at least one connection, the at least one connection being a logical path between at least one server inside an intranet and at least one client outside the intranet. Claims 1, 14, 17, 28 and 34, as amended, also recite that an intranet is a network accessible only by authorized users.

The Action on page 2 suggests that de la Salle describes a separate intranet for a server communicating to clients external to that intranet (FIG. 1). However, de la Salle, at most, describes, in col. 6, lines 6-11, in reference to FIG. 1, that a computer network

12 is shown to be an overall array which includes a number of discretely identifiable branch arrays, referred to for simplicity as LAN 14, although it is recognized that each of the branches may not fit the classic definition of a local area network, since each does not include a server component." As such, de la Salle does not describe or suggest an intranet, i.e., a network accessible only by users with authorization. Thus, de la Salle also does not describe or suggest measuring network traffic transferred in and out of the intranet or in and out of a server or metrics server in the intranet, or measuring network traffic between a server inside the intranet and a client outside the intranet, as recited in claims 1, 14, 17, 28 and 34.

Dobbins also describes, in col. 13, lines 41-60 in reference to FIG. 4, an "illustration of a networking chassis adapted to incorporate the SFPS technology. As shown, the chassis 30 is a mechanical enclosure 31 which is used to house a plurality of networking modules 32, which may include repeater modules, bridge modules, router modules, terminal servers, file servers, etc. The chassis or hub in a mostly connection of diverse LAN segments, including internet, token ring and FDDI segments, as well as to wide area networks (WANS)." As such, Dobbins also does not describe or suggest an intranet and thus does not describe or suggest measuring network traffic transferred in and out of the intranet or in and out of a server or metrics server in the intranet, or measuring network traffic between a server inside the intranet and a client outside the intranet, as recited in claims 1, 14, 17, 28 and 34. Accordingly, claims 1, 14, 17, 28 and 34 are believed to be patentable.

Therefore, since claims 2-8 depend from claim 1 and contain additional limitations that are patentably distinguishable over the references of record, claims 2-8 are also believed to be patentable. Also, since claims 15-16 depend from claim 14 and contain additional limitations that are patentably distinguishable over the references

of record, claims 15-16 are also believed to be patentable. Furthermore, since claims 18-19 depend from claim 17 and contain additional limitations that are patentably distinguishable over the references of record, claims 18-19 are believed to be patentable. Moreover, since claims 29-32 depend from claim 28 and contain additional limitations that are patentably distinguishable over the references of record, claims 29-32 are believed to be patentable. Also, since claims 35-36 depend from claim 34 and contain additional limitations that are patentably distinguishable over the references of record, claims 35-36 are believed to be patentable.

Claim 2 also recites that the at least one connection is delimited by a last packet from the specific source to the specific destination. The Action on page 3, indicates that de la Salle teaches "a first packet being transmitted between two nodes as a data segment is detected between the two nodes and an end to the data stream is detected by a lack of packets or after a last packet (col. 18, lines 14-28)."

However, de la Salle and Dobbins do not describe or suggest that a last packet from the specific source to the specific destination delimits the connection. De la Salle does describe, in col. 18, lines 25-26 and as noted in the Action, that the end of the transaction is determined in response to detecting an absence of successive ones of data packets. However, de la Salle and Dobbins do not describe or suggest that a last packet (rather than an absence of a packet) delimits the connection and the last packet is from a specific source to the specific destination. Accordingly, even if there is a motivation to combine de la Salle and Dobbins, the references combined do not arrive at the invention as recited in claim 2 and thus claim 2 is believed to be patentable.

Claim 3 also recites that the specific source is identified by a source Internet Protocol address in the first packet and the

specific destination is identified by a destination Internet Protocol address in the first packet.

The Action indicates, on page 3, that "de la Salle teaches in IBM compatible computer or various subnetworks as types of networks developed for the configuration described herein; however, de la Salle fails to teach IP addresses assigned to the server and client as references for the source and destination addresses used to identify the respective nodes of the network, the Examiner takes official notice that an IP address is well known as a means to identify a node on a network especially within IBM compatible computers and related subnetworks." However, in the absence of specific evidence that a first packet for a connection has a source internet protocol address and a destination internet protocol address to identify respectively the source and destination would be obvious to a person of ordinary skill in the art, the rejection based on "general knowledge" or "common sense" is improper. See *In re Lee*, 61 U.S.P.Q. 2d 1430, 1435 (Fed. Cir. 2002). Instead, the action must articulate, and place on the record, any knowledge to which it refers. *Id.*

Here, the Action also simply takes Official notice that it is well known that an IP address is well known as a means to identify a node on a network especially within IBM compatible computers and related subnetworks. However, the Action fails to cite any objective evidence that such knowledge actually exists. Furthermore, the Action fails to meet the obligation to show that the first packet for a connection having a source internet protocol address and a destination internet protocol address to identify respectively the source and destination would have been obvious to a person with ordinary skill in the art. *Id.* For these reasons, Applicants respectfully request withdrawal of the rejection or requests the reference that supports the Action's position and in particular the reference that describes that a first packet for the connection has a source internet protocol

address and a destination internet protocol address to identify respectively the source and destination.

Claim 8, as amended, recites that an active connection table contains entries for a connection that is active during a predetermined measurement time interval and an entry is deleted from memory when the at least one connection for the entry is inactive when the predetermined measurement time interval expires.

The Action, on page 4, indicates that "de la Salle teaches server 32 acting as a router for calculating hop counts, the Examiner takes official notice that the most basic needs of a router are memory for routing table storage and data forwarding and a network interface." However, de la Salle does not describe or suggest an active connection table with entries for connections that are active during a measurement time interval and thus de la Salle does not teach or suggest an active connection table being stored in memory. De la Salle also does not describe or suggest that an entry is deleted from memory when the at least one connection for the entry is inactive when the predetermined measurement time interval expires. Accordingly, even if there is a motivation to combine the references, claim 3 is believed to be patentable.

Furthermore, in the absence of specific evidence that an active connection table with entries for connections that are active during a measurement time interval and storing the active connection table in memory would be obvious to a person of ordinary skill in the art, the rejection based on "general knowledge" or "common sense" is improper. See *In re Lee*, 61 U.S.P.Q. 2d 1430, 1435 (Fed. Cir. 2002). Instead, the action must articulate, and place on the record, any knowledge to which it refers. *Id.* Here, the Action also simply takes Official notice that it is well known that most basic needs of a router are memory for routing table storage and data forwarding and a network interface. However, the Action fails to cite any objective evidence that such knowledge actually exists. Furthermore, the Action

fails to meet the obligation to show that an active connection table with entries for connections that are active during a measurement time interval and storing the active connection table in memory would have been obvious to a person with ordinary skill in the art. *Id.* For these reasons, Applicants respectfully request withdrawal of the rejection or requests the reference that supports the Action's position and in particular the reference that describes an active connection table with entries for connections that are active during a measurement time interval and storing the active connection table in memory.

Claim 31 recites that network traffic is intrusively measured between a server and a client in an intranet. Claim 32 also recites that the intrusive measurement of network traffic includes injecting and monitoring probing packets that are transferred between the at least one server and the at least one client outside the intranet. Claim 36 also recites intrusively measuring network traffic for the at least one connection.

As noted above in reference to claim 1, de la Salle and Dobbins do not describe or suggest an intranet, i.e., a network accessible only by users with authorization. Thus, even if there is a motivation to combine the references, de la Salle and/or Dobbins also does not describe or suggest intrusively measuring network traffic between a server and a client in an intranet or injecting and monitoring probing packets that are transferred between a server and a client outside the intranet.

Additionally, regarding claim 32, the Action on page 4 indicates that "de la Salle teaches: a probe computer that probes the network (FIG. 2) but fails to teach of intrusive or probing packets being added to the regular flow of data in a respective network. Dobbins teaches: a probe packet used on a connection establishment determination network arrangement. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention

was made to have combined the use of probe packets on a network as an effective means to track packets on a network." However, Dobbins at most describes, in col. 16, lines 30-35, that "if the broadcast frame was a probe or address resolution packet (i.e., an implied connect request), the call processor will return a probe reply as a "proxy" which gives the destination end system MAC addresses. Subsequently, the source end system can then send packets directly to the destination based on its MAC address." Thus, Dobbins describes a probe packet to receive a return probe reply to give the destination end system and not monitoring and injecting probing packets for intrusively measuring network traffic. Accordingly, even if there is a motivation to combine the references, Dobbins and/or de la Salle do not describe or suggest monitoring and injecting probing packets for intrusively measuring network traffic.

Furthermore, there is no motivation to combine de la Salle and Dobbins to arrive at the Applicants' invention as recited in claims 31-32 and 36. In fact, de la Salle describes in col. 4, lines 61-63 that "an advantage of the present invention is that it can act in a "passive" mode, without sending out frequent query messages which only add traffic onto a network" and in the Abstract, a "system (10) is used to measure a transaction response time of a transaction on a distributed application in a way which is non-intrusive to the application by examining data packets for the presence or absence of session layer data." Thus, neither de la Salle or Dobbins provide a motivation to combine with the other to provide a method comprising non-intrusive and intrusive measuring of network traffic as provided in claims 31-32 and 36. Accordingly, claims 31-32 and 36 are believed to be patentable.

Also, on page 4 of the Action, claims 9-11 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over de la Salle in view of Dobbins in further view of U.S. Patent No. 5,375,070 issued to

Hershey et al. ("Hershey"). This rejection is respectfully traversed.

As noted above, claim 1 is believed to be patentable and since claims 9-11 depend from claim 1 and contain additional limitations that are patentably distinguishable over the references of record, claims 9-11 are also believed to be patentable.

Claim 9 also recites that a processor updates an active connection table based on a measured network traffic and a predetermined measurement time interval. As noted previously, in reference to claim 8, neither de la Salle or Dobbins describe an active connection table with entries for a connection that is active during a predetermined measurement time interval.

Hershey does describe, in col. 5, lines 19-25 and in FIG. 1A, that a "router 115 uses a routing table contained therein to establish a logical and/or physical connection between one of the senders A1, A2 or A3 and one of the destinations B1, B2 or B3. The routing table shown in FIG. 1A illustrates that the source A1 is connection to the destination B1 over the path P2 which is the FDDI network 126." Hershey further describes, in col. 5, lines 53-57, that the "router 115, in response, will revise its routing table so as to connect the sender A2 to the destination B2 over a different network providing a more optimal communication than that currently provided by the token ring LAN 124." However, Hershey does not describe or suggest updating the table based on measured network traffic and the predetermined measurement time interval or a processor configured to do the updating, as recited in claim 9. Accordingly, even if there is any motivation to combine de la Salle, Dobbins and Hershey, the references combined do not arrive at the invention as claimed in claim 9 and thus claims 9 is believed to be patentable.

Claim 11 recites that the generation of performance metrics includes the determination of source and destination Internet Protocol

addresses and timestamp information of the packets captured within the predetermined measurement time interval.

The Action on page 5 indicate that "Hershey teaches: a network with a time stamp as a means for tracing data for a time dependent network (col. 1, lines 40-46) and a data processor 105 coupled to memory 100 and a table for storage of source and destination information." Hershey does describe, in col. 1, lines 40-46, that the "term "trace" refers to a record of all frames and bytes transmitted on a network, as well as environmental information. Two examples of environmental information include time stamps and control block information. A trace usually provides a complete picture of time dependent network behavior." Thus, although Hershey does describe environmental information including time stamps, Hershey does not describe or suggest how the time stamps are determined and more specifically that performance metrics with time stamp information of packets captured within a predetermined measurement time interval are generated, as recited in claim 11. Accordingly, even if there is any motivation to combine de la Salle, Dobbins and Hershey, the references combined do not arrive at the invention as claimed in claim 11 and thus claims 11 is believed to be patentable.

Claim 37, as amended, recites examining packets being transferred during a plurality of connections, such that each connection is a logical path between a server in the intranet and a client outside the intranet. As noted previously, de la Salle, Dobbins and Hershey do not describe or suggest an intranet and thus also do not describe or suggest the server in an intranet and a client outside the intranet or a logical path between a server in the intranet and a client outside the intranet and thus neither of the references describe or suggest examining packets transferred during the connection between the server in the intranet and a client outside the intranet.

Claim 37 also recites that performance metrics are generated from the examined packets for the connections upon the expiration of a

predetermined measurement time interval and deleting each created record corresponding to each connection of the plurality of connections that becomes inactive when the predetermined measurement time interval expires. The Action, on pages 5-6, indicates that de la Salle fails to teach of any plurality of metrics being measured by a server and a processor coupled to a network interface or a record adding a deletion method dependent upon data metrics. The Action further indicates on page 6 that "Dobbins teaches: a network with a processor coupled to a network interface (FIG. 5) and metrics measured and calculated throughout the system to establish traffic routing assistance providing a better efficiency (col. 4, lines 20-40). Hershey teaches: a network routing system with a routing table interfaced with network interfaces of memory 100 and processing unit 105 (Figure 1A) updated periodically depending on the source or destination packets received therein. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined a processor and metrics calculation with a server and client type network using non-intrusive techniques with a dynamic record keeping unit to further, increase efficiency and maintain accurate records of neighboring devices."

In col. 4, lines 20-40, Dobbins does describe that an "important aspect of the invention is a method of determining a path between two nodes (end systems) on the network which has the following properties: the path is optimal for one metric and passes a set of threshold tests for a number of other metrics; and, it must do so with a given time constraint." Hershey, in col. 5, lines 19-23, also describes that a "router 115 uses a routing table contained therein to establish a logical and/or physical connection between one of the senders, A1, A2 or A3 and one of the destinations B1, B2 or B3" and further describes in col. 5, lines 53-57, that the "router 115, in response, will revise its routing table so as to connect the sender A2 to the destination B2 over a different network providing a more optimal communication

than that currently provided by the token ring LAN 124." However, the references do not describe generating performance metrics from the examined packets for the connections upon the expiration of a predetermined measurement time interval. The references also do not teach or suggest deleting records corresponding to connections that become inactive beyond a measurement time interval. Accordingly, even if there is any motivation to combine de la Salle, Dobbins and Hershey, the references combined do not arrive at the invention as claimed in claim 37 and thus claim 37 is believed to be patentable.

Claim 38 also recites that upon the expiration of a predetermined measurement time interval performance metrics that were accumulated and generated are distributed. The action on pages 5-6 does not provide any reference to de la Salle, Dobbins and/or Hershey that the references describe distributing the performance metrics and in particular distributing the performance metrics upon the expiration of a predetermined measurement time interval as recited in claim 38. However, the references do not describe or suggest distributing the performance metrics and in particular distributing the performance metrics upon the expiration of a predetermined measurement time interval as recited in claim 38. Accordingly, even if there is a motivation to combine the references, the reference combined do not arrive at the invention as recited in claim 38 and thus claim 38 is believed to be patentable.

Claim 39 recites continuing to examine packets and generate, accumulate and distribute performance metrics for a plurality of successive predetermined measurement time intervals. As noted above, in reference to claim 38, the action on pages 5-6 does not provide any reference to de la Salle, Dobbins and/or Hershey that the references describe continuing to examine packets and generate, accumulate and distribute performance metrics for a plurality of successive predetermined measurement time intervals and in particular continuing to distribute performance metrics for a plurality of successive

predetermined measurement time intervals as recited in claim 39. Also, the references do not describe or suggest continuing to generate, accumulate and distribute performance metrics for a plurality of successive measurement time intervals as recited in claim 39. Accordingly, even if there is a motivation to combine the references, the reference combined do not arrive at the invention as recited in claim 39 and thus claim 39 is believed to be patentable.

Also, since claims 38-39 depend from claim 37 (which is believed to be patentable) and contain additional limitations that are patentably distinguishable over the references of record, claims 38-39 are also believed to be patentable.

On page 6 of the Action, claims 20-24, 26 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over de la Salle in view of Dobbins and further in view of U.S. Patent No. 5,963,540 issued to Bhaskaran. Applicants respectfully traverse this rejection.

Claim 20 recites a second metrics server that is configured to non-intrusively measured network traffic being transferred in and out of the intranet and to generate performance metrics based on the network traffic measured. As noted previously in reference to claim 1, the references, de la Salle and Dobbins, do not teach or suggest an intranet and thus non-intrusively measuring network traffic in and out of the intranet and thus de la Salle and Dobbins do not describe or suggest the second metrics server non-intrusively measuring network traffic in and out of an intranet.

The Action also indicates on page 7 that Bhaskaran "teaches: conventional network with two servers (FIG. 1) with network links between the two servers on an IP network (col. 1, lines 15-24). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the conventional network configuration of two servers with the above embodiment in order to establish a conventional topological configuration for providing added services for flexible enhancement

purposes." However, Bhaskaran also does not describe or suggest non-intrusively measuring network traffic being transferred in and out of an intranet. Therefore, Bhaskaran also does not describe or suggest a second metrics server non-intrusively measuring network traffic as recited in claim 20. Accordingly, even if there is any motivation to combine de la Salle, Dobbins and Bhaskaran, the references combined do not arrive at the invention as claimed in claim 20 and thus claim 20 is believed to be patentable.

Claim 23 recites that a first metric server distributes performance metrics generated by the first metric server to the second metric server in the intranet. Claim 24 also recites that the second metric server distributes its performance metrics generated by the second metric server to the first metrics server in the intranet. Claim 33 also recites distributing performance metrics generated by the at least one server to another at least one server inside the intranet. Bhaskaran does describe, in col. 1, lines 15-24 and FIG. 1, a network with a first server connected to a router and a second server connected to the router. However, Bhaskaran does not describe or suggest that the first or second server is configured to distribute performance metrics generated by each server to the other respective server in the intranet. Furthermore, the references do not provide a reason or motivation for distributing the performance metrics generated by each server to be supplied to the respective other server in the intranet as recited in claims 23-24 and 33. Accordingly, even if there is any motivation to combine de la Salle, Dobbins and Bhaskaran, the references combined do not arrive at the invention as claimed in claim 23-24 and 33 and thus claims 23-24 and 33 are believed to be patentable.

Also, since claims 20-24 depend from independent claim 17, which as noted previously is believed to be patentable, and thus claims 20-24 include all the features recited in claim 17, claims 20-24 are also believed to be patentable. Furthermore, since claim 33 depends from

claim 28, which as noted previously is believed to be patentable, and thus claim 33 includes all the features recited in claim 28, claim 33 is also believed to be patentable.

Claim 26 also recites that performance metrics generated by the first and second metric servers are distributed on a predetermined periodic basis. The Action indicates on page 7 that de la Salle "teaches all the embodiments except a second server, while it was shown that it would have been obvious to combine a second server with a configuration taught by the applicant, it was not taught that the servers would periodically exchange metrics data, the Examiner takes official notice that it is well known in the art to a Microsoft certified systems engineer or related network training that a second server will communicate with a primary server periodically to gather whatever predefined metrics are administered currently by the primary server."

However, in the absence of specific evidence that distributing performance metrics generated by the first and second metrics server on a predetermined periodic basis would be obvious to a person of ordinary skill in the art, the rejection based on "general knowledge" or "common sense" is improper. See *In re Lee*, 61 U.S.P.Q. 2d 1430, 1435 (Fed. Cir. 2002). Instead, the action must articulate, and place on the record, any knowledge to which it refers. *Id.* Here, the Action also simply takes Official notice that it is well known that a second server will communicate with a primary server periodically to gather whatever predefined metrics are administered currently by the primary server. However, the Action fails to cite any objective evidence that such knowledge actually exists. Additionally, the Action fails to meet the obligation to show that distributing performance metrics generated by the first and second metrics server on a predetermined periodic basis would have been obvious to a person with ordinary skill in the art. *Id.* For these reasons, Applicants respectfully request withdrawal of the rejection or requests the

reference that supports the Action's position and in particular the reference that describes distributing performance metrics generated by the first and second metrics server on a predetermined periodic basis.

On page 8 of the Action, the Applicants acknowledge with appreciation that claims 12-13, 25 and 27 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. Accordingly, claims 12, 25 and 27 have been amended to include the respective base claims and intervening claims and not narrowed. Claim 13 depends from the now independent and allowable claim 12. Therefore, claim 13 is believed to be patentable.

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration of the application and allowance of claims 1-39. If the Examiner believes that a telephone conference with the Applicant's attorney might expedite prosecution of the application, the Examiner is invited to call at the telephone number indicated below.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By



Patrick Y. Ikehara

Reg. No. 42,681

626/795-9900

PYI/rmw

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A metrics server in an intranet comprising:
a network interface device configured to non-intrusively measure network traffic transferred in and out of an intranet for at least one connection, the at least one connection being a logical path from a specific source to a specific destination, the intranet being a network accessible only by authorized users; and

a processor coupled to the network interface device and configured to generate performance metrics for a predetermined measurement time interval using the measured network traffic for the at least one connection.

8. (Amended) The metrics server of claim 7 wherein the memory further stores an active connection table containing entries for the at least one connection that is active during the predetermined measurement time interval and an entry is deleted from memory when the at least one connection for the entry is inactive when the predetermined measurement time interval expires.

12. (Amended) ~~[The]~~ A metrics server in an intranet ~~[of claim 11]~~ comprising:

a network interface device configured to non-intrusively measure network traffic transferred in and out of an intranet for at least one connection, the at least one connection being a logical path from a specific source to a specific destination;

a processor coupled to the network interface device and configured to generate performance metrics for a predetermined measurement time interval using the measured network traffic for the at least one connection;

wherein the at least one connection is delimited by a first packet from the specific source to the specific destination and a last packet from the specific source to the specific destination;

wherein the specific source is identified by a source Internet Protocol address in the first packet and the specific destination is identified by a destination Internet Protocol address in the first packet for the at least one connection;

wherein the specific source is the metrics server and the specific destination is at least one client outside the intranet and the measured network traffic includes packets being transferred between the metrics server and the at least one client;

wherein the network interface device is further configured to filter the measured network traffic such that only header information contained within the packets being transferred are captured by the network interface device;

a memory coupled to the network interface device and the memory stores the measured network traffic;

wherein the memory further stores an active connection table containing entries for the at least one connection that is active during the predetermined measurement time interval;

wherein the processor is further configured to update the active connection table based on the measured network traffic and the predetermined measurement time interval;

wherein the processor is further configured to accumulate the performance metrics generated for the at least one connection that extends pass the predetermined measurement time interval;

wherein the processor configured to generate performance metrics includes the determination of source and destination Internet Protocol addresses and timestamp information of the packets captured within the predetermined measurement time interval; and

wherein the predetermined measurement time interval is one minute.

14. (Amended) A measurement infrastructure comprising:

a plurality of clients outside an intranet, the intranet being a network accessible only by authorized users;

at least one server inside the intranet coupled to the plurality of clients outside the intranet; and

a metrics generator coupled to the at least one server, the metrics generator is configured to non-intrusively measure network traffic being transferred in and out of the at least one server and to generate performance metrics from the network traffic measured.

17. (Amended) A measurement infrastructure comprising:

a plurality of clients outside an intranet, the intranet being a network accessible only by authorized users; and

a first metrics server inside the intranet coupled to the plurality of clients and configured to non-intrusively measure network traffic being transferred in and out of the intranet and to generate performance metrics based on the network traffic measured.

25. (Amended) ~~[The]~~ A measurement infrastructure [of claim 24] comprising a plurality of clients outside an intranet;

a first metrics server inside the intranet coupled to the plurality of clients and configured to non-intrusively measure network traffic being transferred in and out of the intranet and to generate performance metrics based on the network traffic measured;

wherein the network traffic measured by the first metrics server includes packets being transferred for at least one first connection, the at least one first connection being a logical path from the first metrics server to one of the plurality of clients outside the intranet;

wherein the performance metrics generated by the first metrics server is for a predetermined measurement time interval using the measured network traffic for the at least one first connection;

a second metrics server that is configured to non-intrusively measure network traffic being transferred in and out of the intranet and to generate performance metrics based on the network traffic measured;

wherein the network traffic measured by the second metrics server includes packets being transferred for at least one second connection, the at least one second connection being a logical path from the second metrics server to one of the plurality of clients outside the intranet;

wherein the performance metrics generated by the second metrics server is for a predetermined measurement time interval using the measured network traffic for the at least one second connection;

wherein the first metrics server distributes performance metrics generated by the first metrics server to the second metrics server in the intranet;

wherein the second metrics server distributes performance metrics generated by the second metrics server to the first metrics server in the intranet; and

wherein the distributed performance metrics includes only the performance metrics generated by the first metrics server and the second metrics server that are different from any previously distributed performance metrics by the first metrics server and the second metrics server.

27. (Amended) ~~[The]~~ A measurement infrastructure ~~[of claim 26]~~ comprising:

a plurality of clients outside an intranet;

a first metrics server inside the intranet coupled to the plurality of clients and configured to non-intrusively measure network traffic being transferred in and out of the intranet and to generate performance metrics based on the network traffic measured;

wherein the network traffic measured by the first metrics server includes packets being transferred for at least one first connection, the at least one first connection being a logical path from the first metrics server to one of the plurality of clients outside the intranet;

wherein the performance metrics generated by the first metrics server is for a predetermined measurement time interval using the measured network traffic for the at least one first connection;

a second metrics server that is configured to non-intrusively measure network traffic being transferred in and out of the intranet and to generate performance metrics based on the network traffic measured;

wherein the network traffic measured by the second metrics server includes packets being transferred for at least one second connection, the at least one second connection being a logical path from the second metrics server to one of the plurality of clients outside the intranet;

wherein the performance metrics generated by the second metrics server is for a predetermined measurement time interval using the measured network traffic for the at least one second connection;

wherein the first metrics server distributes performance metrics generated by the first metrics server to the second metrics server in the intranet;

wherein the second metrics server distributes performance metrics generated by the second metrics server to the first metrics server in the intranet;

wherein the performance metrics generated by the first and second metrics servers are distributed on a predetermined periodic basis; and

wherein the predetermined periodic basis is one minute after performance metrics have been generated by the first and second metrics servers.

28. (Amended) A method of providing network performance metrics using an intranet, the intranet having at least one server, the method comprising:

non-intrusively measuring network traffic between at least one server in an intranet and at least one client outside the intranet, the intranet being a network accessible only by authorized users; and

generating performance metrics from the network traffic measured between the at least one server and the at least one client within a predetermined measurement time interval.

34. (Amended) A method of providing network performance metrics using an intranet, the intranet having at least one server, the method comprising:

non-intrusively measuring network traffic for at least one connection, the at least one connection being a logical path between at least one server inside an intranet and at least one client outside the intranet, the intranet being a network accessible by authorized users;

generating performance metrics from the network traffic measured based on the at least one connection within a predetermined measurement time interval; and

accumulating the generated performance metrics for the at least one connection that remains active beyond the predetermined measurement time interval.

37. (Amended) A method of providing network performance metrics using an intranet, the intranet having at least one server, the method comprising:

examining packets being transferred during a plurality of connections, such that each connection of the plurality of connections is a logical path between at least one server in the intranet and at

least one client outside the intranet, the intranet being a network accessible by authorized users;

generating performance metrics from the examined packets for the plurality of connections upon the expiration of a predetermined measurement time interval;

accumulating performance metrics from the generated performance metrics for the plurality of connections for each of the plurality of connections that remain active beyond the predetermined measurement time interval;

creating a record for each connection of the plurality of connections that are active during a predetermined measurement time interval; and

deleting each created record corresponding to each connection of the plurality of connections that becomes inactive when ~~[beyond]~~ the predetermined measurement time interval expires.